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## THESIS

A STUDY INTO THE ORIGINS AND NATURE  
OF PERFORMANCE AND PROGRAM BUDGETING

by

W. M. Weisskopf

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A STUDY INTO THE ORIGINS AND NATURE  
OF PERFORMANCE AND PROGRAM BUDGETING

by

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Performance budgeting has been a by-word within the Department of Defense for over ten years. It was proposed as a means of finding out what was done with the money expended for military programs. The program budget is now being introduced in order to achieve this same purpose. This study sought to define both of these terms as they relate to military budgeting. In the course of this study, the major proposals for program or performance budgeting were reviewed. The program budget was found to be a meaningful and useful concept. The performance budget did not meet either of these criteria, nor was it subject to an exact definition.

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## CHAPTER I

### THE PROBLEM AND ITS ORIGINS

Since the conclusion of World War II, the amount of funds expended for National Defense has become a major concern to the American People. In the present era, with defense spending rising to over 50 Billion dollars each year, the method of spending this money receives increased attention. This attention has given impetus to a wide range of proposals for budgetary reform. These proposals are usually referred to as either performance or program type budgeting. The terms have been used interchangeably by some authors giving rise to a certain amount of confusion with regard to their true meaning.

#### I THE PROBLEM

Statement of the problem. It was the purpose of this study to enquire into the origins of the terms performance and program budgeting in order to determine if the two concepts possess a separate and discernible identity. In the course of the study, the major proposals for program or performance budgeting were reviewed in an attempt to present a universal definition of the two terms.

Importance of the study. Performance budgeting has been used in defense spending for the past fifteen years. Although the

term has been given much publicity, it is difficult to find two authors who agree on an exact interpretation of what the term actually means. The program budget was introduced into the budget cycle in fiscal year 1963. The importance of this type of budgeting was attested to by Mr. Bell in a recent statement before a Congressional sub-committee.

So far as military planning and budgeting are concerned, we believe that this (program package) will represent a considerable step forward over the older method of grouping expenditures by service (Army, Navy, Air Force), and expenditure category (personnel, procurement, research and development, etc.).<sup>1</sup>

Since program budgeting has become an integral part of defense spending, it is necessary that there be a clearer distinction made between the two types of budgeting, performance and program.

## II DEFINITION OF TERMS USED

The basis for this study was a review of the various definitions or proposals that have been applied to performance and program budgeting. Accordingly, it is not possible to present a definition of these terms at this point in the study. A few of the more common terms used in this study are defined below:

Appropriation. Appropriation has been defined as a statutory authorization to make payments out of the Treasury for specified

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<sup>1</sup>Statement of David E. Bell, Director of the Bureau of the Budget, before the Subcommittee on National Policy Machinery of the Senate Committee on Government Operations, July 25, 1961.

purposes. The statutory definition of the term appearing in legislation includes funds, authorization to create obligations by contract in advance of appropriations, and any authority making funds available for obligation or expenditure.<sup>2</sup>

Apportionment. An apportionment is a distribution by the Bureau of the Budget of amounts available for obligation or expenditure in an appropriation into amounts available for specified time periods, activities, functions, projects, objects, or combinations thereof. The amounts so apportioned limit the obligations to be incurred, or when so specified, expenditures to be accrued.<sup>3</sup>

Allocation. An allocation is the subdivision of apportioned funds to the subhead level. The only subdivision of funds below this level are allotments or suballotments.<sup>4</sup>

Allotment. An allotment is an authorization between heads or other authorized employees of an agency to incur obligations within a specified amount pursuant to an appropriation or other statutory provisions.<sup>5</sup>

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<sup>2</sup>Section 21 of the Bureau of the Budget Circular No. A-34 (July, 1957).

<sup>3</sup>Ibid.

<sup>4</sup>Para. IV, DOD Directive 7200.1 (Aug. 18, 1955).

<sup>5</sup>Op. Cit., BuBud Circular.

Obligation. Obligations are amounts of orders placed, contracts awarded, service received, and similar transactions during a given period requiring the disbursement of money. Such amounts include disbursements not preceded by the recording of obligations and reflect adjustments for differences between obligations and actual disbursements.<sup>6</sup>

### III ORGANIZATION OF THE THESIS

The remainder of this chapter will be devoted to a brief resume of the historical development of budgeting. Chapter II contains the background and development of performance and program budgeting. In addition, it contains a review of the more significant proposals for improved budgeting. The third and final chapter summarized the salient characteristics of the two concepts and presents some proposals relating to their true nature.

### IV HISTORICAL DEVELOPMENT OF BUDGETING

Budgets in government have had a history that is quite similar to the development of the political institutions which they support. The modern concept of a fixed amount of funding that is controlled by the representatives of the people had its origin in the 12th article of the Magna Carta which stated:

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<sup>6</sup>Ibid.



No scutage or aid shall be imposed in the kingdom unless by common council of the realm, except for the purpose of ransoming the King's person, making his first born son a knight, and marrying his eldest daughter once, and the aids for this purpose shall be reasonable in amount.

This interest or control over revenues was later extended to the purpose for which the revenues were used. After the revolution of 1688, the Parliament declared its ascendancy by reserving the right to authorize all expenditures made by the Crown. The English budgetary process was still in the process of evolution at the time of the American revolution. There was no accepted British practice which could be emulated by the framers of the Constitution.

The Constitution does follow the English precedent that all revenue measures must originate in the lower house. Beyond this, it merely states that "No money shall be drawn from the treasury, but in consequence of appropriations made by law; and a regular statement and account of the receipts and expenditures of all public money shall be published from time to time".<sup>7</sup> During the early formative years, the strong executive leadership taken by Alexander Hamilton in his role as Secretary of the Treasury was the prime force in developing a budget process. Henry James Ford had the following to say about the period:

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<sup>7</sup>The Constitution of the United States, Article I, Sect. 9.

In the begining all the branches of government were bunched together in their quarters so that the intercourse was ready and easy without formal arrangements, and brief notices of the direct presence of cabinet officials appearing in the records give an adequate notion of the real extent of the intimacy. It was by direct, personal administrative initiative that government was set in operation. Only by such agency could the finances have received the radical treatment by which Hamilton almost at a stroke lifted the nation out of bankruptcy, established its credit and secured its revenues...His personal initiative transcended even the function of an English Chancellor of the Exchequer on which it was distinctly modelled, for he had no other compact party on which he could depend.<sup>8</sup>

This personal type of financial management continued until 1802. During this period, the Lower House considered appropriation acts as a committee of the whole. In 1802, the House established a permanent Committee On Ways and Means. This marked the end of personal executive direction of Congressional Appropriations. In fact, friction developed between the Administration and Congress to a point where all communication became formal. The Congress exercised a detailed interest in appropriation matters in order to curb executive discretion.<sup>9</sup> The Congress enacted a series of laws that were designed to strengthen its control over fiscal affairs.

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<sup>8</sup> Henry James Ford, Budget Making and the Work of Government, (The Annals, November 1915), pp. 4-5. Quoted from Jesse Burkhead, Government Budgeting, (New York: John Wiley & Sons, Inc., 1956), pp. 9-10.

<sup>9</sup> Arthur Smithies, The Budgetary Process in the United States, (New York: McGraw-Hill Book Co., 1955), pp. 53-54.

An act passed in 1809 required that officers who receive public funds account for them in accordance with the appropriations, and to apply them solely to the purpose for which they were appropriated.<sup>10</sup> Other acts passed in 1817 and 1823 set limits on claims against the government and prohibited unauthorized disbursement of government funds.<sup>11</sup>

From 1802 until 1865, the House Ways and Means Committee dominated and controlled the spending and revenue measures of the Government. The position of the Secretary of the Treasury became that of a clerk who classified expenditures and transmitted them to the Congress. He had no interest in the size and purpose of the funds being requested. The remainder of the President's cabinet had a similar disinterest in financial planning. It was left to the Ways and Means Committee to act as the review agency for all government financing.

In 1865, a separate House Appropriations Committee was established and this ended the period of unity that had prevailed during the first 75 years of federal financial operations. By 1885, there were eight different appropriation committees in the House, each with the power to recommend the expenditure of public funds.

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<sup>10</sup>Act of March 3, 1909 (2 Stat. 535).

<sup>11</sup>Act of March 3, 1817 (3 Stat. 366) and Act of Jan. 31, 1823 (3 Stat. 723).

This resulted in the rapid erosion of fiscal controls. The period from 1880 until 1909 was characterized as one of extreme laxity in federal spending. It was a period in which the major financial problem faced by the Congress was the annual disposal of the large surplus accumulated by the tariff.<sup>12</sup>

The failure of Congress to exercise its responsibility created a similar indifference within the Executive branch. The spending plans of the executive departments bore little resemblance to the appropriations enacted by the Congress. This situation was aptly described by Wilmerding:

The departments governed their expenditures by the amounts of the estimates rather than by the amounts of the grants. If in any case less were granted than was estimated, the department or bureau affected, instead of revising its plans for the coming year to bring them within the financial limits of the reduced appropriation, continued them without change in perfect confidence that Congress would appropriate supplementary sums when they were requested rather than stop the service.<sup>13</sup>

The passage of the Anti-Deficiency Act in 1875 had little if any effect on these excesses. This act prohibited any officer or employee of the government from making or authorizing an expenditure or obligation under any appropriation or fund in excess of the amount available therein or in advance of an appropriation, unless the contract or obligation was authorized by law.<sup>14</sup>

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<sup>12</sup>Jesse Burkhead, Government Budgeting, (New York: John Wiley & Sons, Inc., 1956), pp. 9-12.

<sup>13</sup>Lucius Wilmerding, Jr., The Spending Power, (New Haven: Yale University Press, 1943), p. 140.

<sup>14</sup>Revised Stat. 3679(a) (1875), 31 U.S.C. 665 (a) (1952).

The Congress did occasionally take action to prevent deficiencies but this action had little success. The movement for budgetary reform did not receive much attention until the administration of President Taft.

In 1909, the Congress began to recognize the need for a semblance of coordination between revenue and expenditure. The Sundry Civil Appropriations Act of that year required that the Secretary of the Treasury should immediately inform the Congress when expenditures exceeded revenues. In addition, he was to advise the Congress on the manner in which expenditures could be reduced or revenues raised to such levels that would eliminate the deficit. Although this measure had little effect, it did mark the beginning of the end for the fiscal chaos that had characterized federal spending during the preceding 25 years.

President Taft appointed a Commission on Economy and Efficiency in 1910 that spent two years analyzing the budget in terms of an annual financial program. It also reviewed the organization and complete operation of the federal government. The Commission's report envisioned a multiple purpose budget. They recommended that the budget be a document for Congressional action, an instrument of control and management by the Chief Executive, and a basis for the administration of the departments. Unfortunately, the Congress for various political reasons was in no mood to accept the recommendations of the committee. Despite this fact, the work of this committee did contribute to the pressure for budgetary reform which

eventually resulted in the passage of the Budget and Accounting Act of 1921.

The establishment of the national budget in 1921 may be viewed as the transition from a Congressional budget to an Executive budget. It also marked the beginning of attempts to introduce business like financial methods into the government and was seen by at least one author as the end of Congressional control over appropriations.<sup>15</sup> The establishment of the Bureau of the Budget and the preparation of an executive budget were important milestones in the control of federal spending. They did not however, cause any great change in the basic appropriation structures. Federal spending continued to be in terms of objects bought for the next 30 years in much the same way as it had been since the days of Alexander Hamilton. It was not until the appointment of the first Hoover Commission in 1947, that people within the federal government started thinking in terms of a revised appropriation structure. The Commission recommended in its 1949 report "that the whole budgetary concept of the federal government should be refashioned by the adoption of a budget based upon functions, activities, and projects."<sup>16</sup>

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<sup>15</sup>Clinton Rossiter, The American Presidency, (New York: Harcourt, Brace, & Co., 1956) p 76. It is an extreme view and would certainly receive an argument from each President since 1921.

<sup>16</sup>Commission on Organization of the Executive Branch of the Government, Budgeting and Accounting, Washington, 1949, p. 8.

The term applied to this type of budgeting was performance. This recommendation marks the beginning of what has been described as performance budgeting within the federal government.

## CHAPTER II

### REVIEW OF THE LITERATURE

There has been a considerable amount of writing devoted to performance and program budgeting. This writing is conveniently divided into two broad categories. First there is the history of the development of actual performance or program applications in budgeting. The second category concerns the theoretical development of proposals for "true" performance or program budgets. This summary will engage but a few of these applications and proposals but they were considered to be the most important and the most representative of the literature written on the subject.

#### THE DEVELOPMENT OF PERFORMANCE BUDGETING

The term performance must have some recognizable and definitive features if it is to be used in describing a type of budgeting. Although the purpose of this study was to define performance, a point of departure had to be established in order to recognize the various forms of performance budgeting. Jesse Burkhead wrote that "performance budgeting can be most appropriately associated with a budget classification that emphasizes the things which a government does, rather than the things which a government buys. Performance budgeting shifts the emphasis from the means of accomplishment to the accomplishment itself."<sup>1</sup>

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<sup>1</sup>Jesse Burkhead, Government Budgeting, op. cit., p. 133.



The first attempt to construct a performance type budget was attributed by A. E. Buck to the Borough of Richmond, New York City, in the years 1913-1915.<sup>2</sup> This type of budgeting was then known as a cost-data budget. The New York Bureau of Municipal Research assisted the Borough of Richmond in establishing a detailed classification system for three public works functions, viz., street cleaning, sewerage, and street maintenance. These functions were each divided into ten subfunctions that were termed work classifications. Physical units of measure, such as miles of street to be maintained were presented in the budget document along with unit costs, and a distribution of outlays by the various objects of expenditures for each subfunction. It is not difficult to understand why this procedure was abandoned two years after its inception.

There were other attempts to construct cost-data budgets during the Thirties and Forties at both the federal and local levels of government. Of these, the most notable were Richmond, Virginia, and the TVA. Mr. Buck's work on the Hoover Commission seems to have been instrumental in introducing the concept to Washington in 1947. However there were a number of agencies thinking along these same lines.

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<sup>2</sup> A.E. Buck, "Performance Budgeting for the Federal Government", Tax Review, July, 1949.

A group within the Navy Department had constructed the fiscal year 1948 budget in appropriation form and also on a program basis. It was this group that brought the idea to the attention of Mr. Hoover.<sup>3</sup>

The report of the Hoover Commission led to the adoption in 1949 of Section 403 of Title IV Public Law 216. This Act introduced performance budgeting into the Department of Defense. It prescribed that budget estimates be prepared, presented, and justified and programs be administered "in such form and manner as the Secretary of Defense....may determine...and on a performance basis; and that they be set forth in a readily comparable form." The vagueness of these words requires that a distinction be made between the concept of performance budgeting and the practice.

In spite of the apparent simplicity of the concept and in spite of the modification in budgetary classifications and appropriation, there is still much question as to whether these departments in fact have performance budgets.<sup>4</sup>

If there were any one point upon which most authors in this field agree, it is that there is no precise definition for a performance budget. It has been given meaning by different groups according to their own position.

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<sup>3</sup>Frederick C. Mosher, Program Budgeting, (Chicago: Public Administration Service, 1954), p. 79.

<sup>4</sup>Ibid., p. 80.

Political economists and legislators think of performance budgeting as a reduction in the variety of appropriations. A means to simplify and clarify the review of expenditures by the costing of specific programs. Members of the Executive departments visualize it as a means of obtaining greater flexibility and freedom in their decision making. They also expect that a performance budget will afford greater control and accountability over their subordinates. To the operator, a performance budget might mean a single source of funds based upon performance of a given function and a considerable amount of latitude in the attainment of this objective. Finally, the accountant equates performance budgeting with accrual accounting, separation of capital from operating expenditures, cost centers with measurable performance, revolving funds, and a whole host of other accounting refinements.

It was for these reasons that the budgets which were introduced into the armed forces in the early 1950's were not performance budgets. The name was applied to budgetary reforms that were then absolutely essential to prevent the accounting structure from falling apart. The Navy reduced the number of its appropriations from 48 to 21 titles. The Army from 21 to 8, and the new Air Forces system used but 9. However, the appropriation titles bore little resemblance to the functions, activities, and projects recommended by the Hoover Commission. Each appropriation funded what might be described as a program but there was no basis within the program for

the measure of accomplishment. In each case, the end product or size of the program had more relation to the amount of money appropriated than it did to the manner in which the program objective was attained. The introduction of the program package in the fiscal 1963 budget did not address itself to this problem since here again the measurement criteria is lacking. This subject will be explored in greater detail in a later section.

#### THE NAVY IMPLEMENTATION OF PERFORMANCE BUDGETING

Following the recommendation of the Hoover Commission and the enactment of Title IV of the National Security Act Amendments of 1949, the President requested the services to submit their 1951 budgets along performance lines. Each of the services was given considerable latitude in determining how they would reshape their appropriation structure. The Navy implementation will be outlined in some detail but the general pattern of events is more or less applicable to the other two services.

The Navy had been facing a financial nightmare for a number of years. At the close of World War II, it received its money in 61 different appropriations. This number was reduced in successive years through 1950 to 48, a number that still posed severe administrative problems for the Navy's Bureau structure. These 48 appropriations were managed by twelve Bureau and Offices including the Marine Corps. A Navy Department pamphlet published in 1950 gave

the following two deficiencies in the then current structure:

First, appropriation requests in the past have not been formulated along program or functional lines. Consequently, no bureau or office in the Department maintains accounts on a basis which shows the cost of conducting such important naval programs, as maintenance and operation of the fleet, medical care, and so on. Programs of this nature are presently financed through numerous appropriations. With the establishment of the Department of Defense, the necessity of budgeting and accounting for funds on a program basis became increasingly apparent, inasmuch as budget determinations at various levels are made on the basis of programs rather than of the bureau or office which will do the work or of the particular objects of expenditure involved.

The second weakness in the present structure rests in the fact that fiscal responsibility is diffused, with the result that internal management is unduly complicated. No one theory appears to have been followed consistently in the evolution of the appropriation structure. Consequently, appropriations based on broad functions are intermingled both with appropriations based upon object classifications, such as transportation, and with appropriations based upon organizational concepts. In many instances single field activities are now financed by numerous appropriations with the result that no single bureau or office of the department can exercise complete financial control over a field activity under its cognizance, nor can a single bureau or office render promptly a complete accounting of costs incurred.<sup>5</sup>

The major emphasis in the fore-going was placed on the formulation of programs that would permit the bureaus to exercise management control. While the first paragraph talks about important naval programs, it should be noted that the programs themselves took the form of the program for which a particular bureau was responsible. Thus the cost of fleet maintenance and operation was a program administered by the Bureau of Ships. The cost of manning these same ships

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<sup>5</sup>Department of the Navy, "Concept of the Navy's 1951 Performance Budget," Office of Budgets and Reports (February 1950), pp. 4-5.

was a separate program administered by the Bureau of Naval Personnel. Medical care was administered by the Bureau of Medicine and Surgery but the staffing of military personnel was again funded by BUPERS. The performance budget that the Navy implemented was developed along program lines that reflected the organization of its bureaus and offices. In this respect, it met the criteria of a budget that revealed functions but it is extremely doubtful that this budget represented activity costs. Personnel costs represent 25% of the military budget. To exclude them from activity costs distorts both budgeting and management.

The Navy's position with regard to program formulation stipulated broad programs that could be used for evaluation and comparison at the Defense level. To implement this within the existing bureau structure, the Navy (and the Army and Air Force) had to fragment its operating and capital programs. The semantic difficulty in the term programming was here apparent. The program could mean the end product that was being purchased or it could mean a function that was contributing to the achievement of the end product.

In the first case, a defense program would consist of all that was required to operate a segment of the operating forces, for example, the cost of Anti-Submarine Warfare. This type of program would include the development, acquisition, and operation of all of the factors involved in ASW. This program would clearly show what

was being procured with the money expended. In the latter case, the functional program aligned itself with the contribution that each of the technical bureaus made to the end product. Unfortunately, each type of program answered the question - What is being done with the money? In one case, it bought types of warfare, in the other it bought personnel, operation, maintenance, and capital equipment.

The Navy placed great emphasis on its programs showing what was being done with the money expended, but it never really faced up to the true intent of this statement. The nature of its bureaus prevented a budget structure based upon end products because the bureaus themselves were contributors to end products. Each technical bureau was responsible (and still is) for providing certain types of support to the operating forces. No single bureau had total responsibility for any one end product. It was therefore impossible to construct a budget that showed end products and still maintain the bureau administrative structure as the vehicle of its implementation.

The conclusions to be reached from this brief summary of the history of performance budgeting is that there has been much selling of the term but very little implementation of the practice. It is strange that a concept like this should have such wide spread acceptance and so little compliance. Perhaps it is the very nature of the concept itself. Is the performance of a defense activity or

any government activity measureable? It is possible to have a true performance budget? The answers to these questions are implicit in a definition of performance budgeting and should be resolved in the course of this study.

#### THE VARIOUS PROPOSALS FOR PERFORMANCE AND PROGRAM BUDGETING

The story has been told in Washington that Former President Hoover himself invented the term "performance budget" to lend sales appeal to a different and improved method of federal budgeting.<sup>6</sup> Whether fact or fancy, it remains true that the idea generated a host of worthy reforms in federal spending. The Hoover Commission itself was exceedingly vague when it attempted to define its major recommendations. Buck stated the following in the Task Force Report:

A program or performance budget should be substituted for the present budget, thus presenting in a document of much briefer compass the Government's expenditure requirements in terms of services, activities, and work projects rather than in terms of things bought.<sup>7</sup>

Mr. Buck used the terms program and performance interchangeably in this explanation making no effort to distinguish between a program and its subsequent performance. The illustrations of programs given in the Task Force Report did not clarify this point. They were

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<sup>6</sup>Mosher, Op. Cit., p. 78.

<sup>7</sup>Task Force Report, Fiscal, Budgeting, and Accounting Activities Washington, 1949, p. 43.



quite broad and are actually examples of simplifying and reducing the appropriation structure in order to improve Congressional review.

In order to find the origin of the performance concept, it is necessary to look at the movement for "efficiency and economy" in government. This movement was stimulated by the transfer of economic marginalism, which was in great repute at the turn of the Century, towards the subject of government. This school of thought was given the rather dubious title of Welfare Economics. The application of efficiency to budgeting was an outgrowth of the use of the term in Welfare Economics. The major contention was that the cost of an object could be equated to the amount of government service that could be provided by the object. The following quotation illustrates this point:

Expenditure should be distributed between battleships and poor relief in such wise that the last shilling devoted to each of them yields that same return of satisfaction....This method of approach suggests an analogous test for determining how large government expenditures in the aggregate ought to be. If a community were literally a unitary being, with government as a brain, expenditure should be pushed in all directions up to the point at which the satisfaction obtained from the last shilling expended is equal to the satisfaction lost in respect of the last shilling called up on government service.<sup>8</sup>

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<sup>8</sup>A.C. Pigou, A Study in Public Finance, (London: MacMillian & Co., Ltd., 1951), p. 31.

The extension of Welfare Economics into the field of budgeting is evident in the work of Herbert A. Simon.<sup>9</sup> Simon drew a parallel between private industry and government in the attainment of efficiency. To replace the profit factor of industry as the criterion for efficiency, he suggested that government must substitute the objectives of the activity being appraised. These objectives would be measured for the degree of attainment by the construction of indices. An index might be any measurement that indicates the effect of an activity in accomplishing its final objective. This index is just an attempt to replace profit with some other yardstick. Naturally the definition of objectives is quite difficult when dealing with the services rendered by government but Simon insisted that it could be done. In fact he said that it was done in every administration. He did not, however, point out that this was a subjective evaluation made by the administrator.

The attainment of the activities objectives is always a matter of degree. This degree of attainment is seldom considered in the formulation of policy and the administration of funds. Simon's use of efficiency in administration would consider this factor. It would also determine the choice between alternate objective. Efficiency indicates that the choice be that which produces the largest result

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<sup>9</sup>This Section is drawn from Simon's chapter on efficiency. See Herbert A. Simon, Administrative Behavior, (New York: MacMillian Company, 1947), pp. 172-197.

for the given application of resources.

Underlying this entire concept of efficiency in Public administration was Simon's proposal for budgeting. He would have two comprehensive budgets, an annual budget, and a long term budget. The long term budget would be made up of several parts. First, there would be long term estimates of trends in problem magnitude for the various departments, eg., mileage of streets which must be kept clean, population to be served by libraries, etc. There would be long term estimates of service adequacy. This entails the level of service that is to be afforded to the citizen. These two estimates would then be combined into a long range work projection showing work units for the services to be rendered and the facilities to be constructed to achieve this program. The last part of the long range budget would be the financial program that relates the work program to the fiscal resources of the community. The annual budget is merely a segment of the long term budget. The approval of the former by the legislature would also constitute approval of the annual budget.

It is difficult to classify Simon's proposal as a performance type budget since its salient features are long term programs. However it does result in a work program composed of performance units and in that context may be looked upon as a performance budget. Since it was first proposed in 1938, it may be viewed as the forerunner of many of the more recent proposals for program budgets. There is a certain amount of similarity between Simon's long range

budget and the program package of Hitch.

Before leaving Simon, a few words should be addressed to his idea of functionalization as related to organization. This will be seen as a major problem in both program and performance budgeting. To have effective functionalization according to Simon, the technology of the organization must be such that the work of the agency can be broken into distinct portions, each of which contribute to but one subsidiary objective. If this type of functionalization is unrealistic, if it does not represent the true organization, it will lead to deterioration in the quality of decisions:

-For in this case the values which are affected by the unit's activities, but which are not comprehended in the statement of the organizational objectives, will be neglected in the decision making process.<sup>10</sup>

Thus Simon reached a conclusion that has been painfully learned by many accountants, comptrollers, and management theorists. Organization must follow function and not vice versa.

Following Simon chronologically were the reforms in budgetary preparation after World War II. There were the revisions prompted by the necessity to streamline the hopelessly entangled appropriation structure. As mentioned before, the movement originated in several sectors of government. Notably the Navy Department and the Bureau of the Budget and culminated in the recommendations of the Hoover

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<sup>10</sup>Ibid., p. 191.

Commission. The next proposal for a "true" performance budget was made by Frederick C. Mosher in 1954.<sup>11</sup>

Mosher surveyed the new military performance budgets and reached the conclusion that they were basically groupings of the cost of supporting elements rather than of the operating elements. He held that a true performance budget should answer such questions as the following:

The program and the cost of combat operations; active defense of the United States; other operations and maintenance; and build-up for the future.

The program and cost of the basic components of air power - strategic, tactical, air defense, and air transport.

The programs and costs for divisions of the Army. The cost of building a division and the cost of maintaining a division.

The program and cost of training for all major military programs.

The program and amounts of procurement for mobilization reserve.

The true costs of our various actual and proposed programs for supporting our allies around the globe.

To solve this riddle of program vs. performance, Mosher proposed

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<sup>11</sup>This next section is based upon Mosher, Op. Cit., pp. 230-249.

two different budget systems. One would be designed for the development, appraisal, and approval of future policies and programs at top levels. The other would facilitate internal programming, management, and control. He called the first type a program budget and the latter an administrative budget. The program budget would be designed to provide precise information to top management for review and decision making. The programs would be presented in terms of costs and their classification would be based upon the mission of the respective departments, not the categories of cost of the items themselves. The definition of this program budget is an expression of costs in terms of things to be done rather than of things to be bought. Mosher's primary program classification for the Army would include:

Combat Operations (if any)

Overseas Non-combat operations

Active Defense of the United States

Operations and Support of Active Forces in the United States

Training

Mobilization Reserve

Research and Development

Construction

Services (not directly allocable)

These broad programs would be subclassified into their most "meaningful elements". The budget would also be supported with other data such as size, type, and readiness of forces; projected requirements of key items of equipment, and projected personnel strength.

All such estimates would be over all round numbers. guesstimates. Dollar detail for budgets that range in the billions are unnecessary, confusing, and suggestive of a non existent degree of accuracy according to Mosher.

The preparation of this type of budget would be at the planning level. Budget and planning for the program budget would be integrated. To accomplish this, the preparation, presentation, and justification would be removed from the comptroller office and assigned to the program planning units of the three services. This program development would be performed at the top level in much the same manner as the present Program Objectives. The field commands could make proposals but the annual program budget would not require their special or annual participation. Costing of the various programs would be based upon previous experience. This method would require reliance upon statistical skills rather than accounting. Mosher did not claim that this type of estimating would achieve great accuracy but he did feel it would do as well as the then current methods (circa 1952). Besides the degree of dollar accuracy is of secondary consideration. The primary purpose of Mosher's budget is to present the proposed programs for the next fiscal year with their approximate costs. The various review agencies and the Congress should be concerned with basic questions such as; should this program be undertaken? should this one be increased or decreased? After these considerations, they might review the adequacy of cost information

but this is a secondary consideration. In addition to this costing of an annual program budget, Mosher also recommended that each budget be accompanied by projections of programs and approximates of costs for the two years following the budget year.

The Administrative budget proposed by Mosher was a vehicle for internal planning and control. Its size and content would follow the approved program budget but it would utilize different classifications. Preparation would be similar to the usual budget formulation except that it would start one year later and thus be based upon the more realistic assumptions of the President's budget. It would be based upon firmer program objectives and a pretty reliable estimate of the funds to be available. This process bears close resemblance to the present financial and funding plans that are now in use since it would culminate in a request to the Bureau of the Budget for apportionment of funds already approved under the program budget.

The content of the administrative budget would be a detailed statement of past, current, and proposed work and the associated costs. It would be based upon a complete and critical examination of past performance and future plans. The structure or primary classification of the administrative budget would not be the program but rather it would be based upon organizational classification. Each command would constitute an organic class in this budget.

While Mosher proposed that budget estimates be presented and



supported in detail by each activity, he held that the allocation and allotment of funds should be in a lump sum. The activity might be given certain guidelines on how to spend the funds but the Commanding Officer at each echelon would have the authority to apply the funds in the most effective manner possible. He would thus have authority to transfer funds to other uses as required by the circumstances. The Commanding Officer would have the responsibility for these decisions and would have to be prepared to defend them. However, there would be no question concerning his authority to make such decisions.

To achieve more meaningful cost data accounting, Mosher stressed the elimination of the various free issue items through their capitalization in stock fund. He also recommended that the pay of all military personnel except those assigned to tactical units and those in full-time training be charged to the activity using their services.

The general conclusions and recommendations made by Mosher were followed in 1955 by another general survey of budgeting made by Professor Arthur Smithies for the Committee on Economic Development.<sup>12</sup> Smithies' recommendations differ slightly from those of Mosher but

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<sup>12</sup>This section is drawn from Chapter XI of Smithies, The Budgetary Process in the United States, (New York: McGraw-Hill Book Co., Inc., 1955), pp. 257-277.

they contain the same basic proposal for two budgets, the program budget and the administrative budget. The later is almost a carbon copy of the administration budget contained in Mosher's work. It too would follow the present funding programs that determine the allocation of appropriations but it would be "improved and strengthened". The administrative budget would be the device used by top service management to conduct "an annual spring house cleaning"<sup>13</sup> to review past, current, and proposed operations. The accounting structure would follow organizational lines with no relation to the program budget. A standard classification of functions would be used to categorize the various programs for budgetary and work planning purposes. However, these would not limit the activity commander in the exercise of his authority over funds allotted to him. "The Commanding Officer at each echelon should have authority to apply the funds in the most effective way possible and to transfer funds as local circumstances require. Only in this way can true command responsibility be exercised".<sup>14</sup>

As the prerequisite to the program budget, Smithies suggested that the approval of the Program Objectives by the Joint Chiefs of Staff and the National Security Council should only be given after

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<sup>13</sup>Ibid., p. 263.

<sup>14</sup>Ibid., p. 264.

after these objectives have been costed out. He maintained that these two bodies must be aware of the dollar consequences of their decisions instead of waiting until each service had priced out its version of the Program Objectives. This change would eliminate much of the friction that now arises annually between the President and the military over the costs of military programs. This costing at the time of JCS planning would also permit the budget time cycle to be reduced by one year. In format, the Smithies' program budget would distinguish costs by the types of forces, the costs of supporting these forces, the cost of force build-up, mobilization reserves, research and development, and general administration. These programs would serve as the basis for Executive and Congressional review and would then result in the annual appropriations. The budget would cover a number of years and contain estimates of appropriations, obligations, and expenditures as well as the effects of expected price changes on these estimates in order to provide an indication of quantity. The last proposal might be a trifle naive from a political standpoint since no administration would ever admit to an "expected" price level increase. A further analysis of Mr. Smithies' program budget is unnecessary since the examples he gave were limited to the Air Force and they bear sufficient resemblance to the Hitch Program package to be considered as an antecedent.

The second Hoover Commission made some notable contribution to the field of defense budgeting but their report more or less deemphasized the term performance budgeting. The fourth recommendation of

the Task Force on Budget and Accounting made the following reference:

(It is recommended) That the executive budget continue to be based upon functions, activities, and projects adequately supported by information on program costs and accomplishment, and by a review of performance by organizational units where these do not coincide with performance budget classification.<sup>15</sup>

If performance budgeting was the "theme song" of the first Hoover Commission<sup>16</sup>, accrued expenditures accounting may be regarded as the theme for the second Commission. In reviewing the Commission's report on Business Organization, the terms accrual accounting, cost based budgets, and accrued expenditures are frequently repeated.<sup>17</sup> This report contains no reference, however, to existing performance budgets. It did state that the existing budget system was "defective as presently practiced in that it does not adequately reveal available resources or cost of performance".<sup>18</sup>

In order to rectify this defective budgetary system, the task force on budget and accounting recommended the elimination of obligation-type budgeting and the substitution in its place of an accrued expenditure budget. This budget would be based upon the value of goods and services estimated to be received during the fiscal year. Long lead-time programs such as weapons systems and major construction would be procured by the use of contract authority granted by Congress. This means that Congress would review

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<sup>15</sup>Task Force Report on Budget and Accounting, (House Doc. 192, 84th Congress)

<sup>16</sup>Mosher, Op. Cit., p. 78.

<sup>17</sup>Business Organization of the Department of Defense, (June 1955).

<sup>18</sup>Ibid., p. 76.

these programs annually in terms of costs and accomplishments, both future and past. The committee also recommended the reduction of budget preparation to a maximum of one year and the simplification of what it called overly detailed justification data.

The most recent and by far the most important proposal for improving the military performance budget was made by Mr. C. J. Hitch, the present Assistant Secretary of Defense (Financial Management).<sup>19</sup> As the DOD Comptroller, Mr. Hitch had been able to implement his proposals for program packages. The major contribution that Hitch has made to the evolution of the program budget is to place great emphasis on end-product missions that cross the traditional service department lines. He placed the various components of the three services into three broad programs: (1) deterrence or fighting of all-out war; (2) deterrence or fighting of limited war; and (3) research and development. When the program package was introduced into the fiscal 1963 budgetary process, this number was expanded to nine packages.

As defined by Mr. Hitch, the program package is an inter-related group of program elements that must be considered together because they support each other or are close substitute for each other. The program element is an integrated activity, a combination

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<sup>19</sup>See C. J. Hitch and R. N. McKean, The Economics of Defense in the Nuclear Age, (Cambridge, Mass: The Colonial Press Inc., 1960).

of men, equipment, and installations, whose effectiveness can be related to national security policy objectives.<sup>20</sup> As examples of elements, Mr. Hitch used wings of B-52 bombers, infantry battalions and combatant ships, taken together with all the equipment, men, installations, supplies, and support required to make them effective military forces.

The first of the nine packages is termed the Central War Offensive Forces Program. This package is divided into a number of general categories: aircraft forces; land based missile forces; sea based missile forces; command control, and communications systems; and headquarters and command support. Aircraft forces consist of wings of B-52's (with air-to-surface missiles listed separately), wings of B-58's and B 47's, the tankers, and the RS-B - 70. The missile forces are Atlas, Titan, Minuteman, and Polaris. The communication links and the command and control systems required for the direction of the strategic forces are also included in this package together with the headquarters and command support that is required. Package two is the Central War Defensive Forces and is an easily definable program. It consists of the Continental Air Defense Command and the Civil Defense Program.

The third program package is the General Purpose Forces, by

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<sup>20</sup>Statement of Assistant Secretary of Defense C. J. Hitch before the subcommittee on National Policy Machinery of the Senate Committee on Government Operations, July, 24, 1961.

far the largest of the programs. These are the forces that can be used in either limited or general war. The package includes most of the regular combat units of the Army, all of the Navy combatant units except polaris submarines, all Marine Corps units, and the Tactical Air Command of the Air Force.

The fourth program package is composed of the sea and air lift. It includes the troop carrier wings of the Air Force, the Military Air Transport Service, and the Military Sea Transportation Service. The Reserve and National Guard Forces make up the fifth package. The elements are grouped by service and within each service by the major mission to which they contribute.

Package six includes all research and development within the Defense Department that does not contribute directly to a program element. All space projects are grouped in this package. Service-wide support is covered by the seventh program package. It contains all activities that are not readily categorized into a mission, force, or weapons system. Elements in this program include general training, overhead for supply and maintenance systems, medical support, and headquarters support. The eighth program consists of classified projects and the ninth funds the Office of the Secretary of Defense.

Each of these programs and program elements are costed by the services in several ways. They are developed by fiscal year into new obligational authority and expenditures, by statutory appropriation accounts and budget titles, and finally by categories of cost.

These categories distinguish between research and development, investment, and operating costs.

Research and development costs include all costs associated with developing a new capability to the point where it is ready for introduction into operational use. These costs include equipment required for the development program and all related facilities, supplies, and personnel related thereto.

Investment costs or capital expenditures are the one time or initial outlays required after the development phase to introduce a new system into operational use. This would include initial training, outfitting of spare parts, etc.

Operating costs may be defined as the recurring costs required to maintain and operate the activity year by year throughout its expected life in operational use.

The implementation of the program package in fiscal 1963 followed the recommendation of all previous budgetary reformers in reducing the time span for formulation to one year. The traditional budgetary process was divided into two phases. The programming phase from June until September and the budgetary phase from October through November 1961. The programming phase differed from the proposals of Smithies<sup>21</sup> in that the programs were based upon general guidance contained in the Basic National Security Policy issued by the National

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<sup>21</sup>Smithies, Op. Cit., p. 257-258



Security Council. It may be remembered that Smithies proposed that these major force objectives be costed prior to approval so that the Joint Chiefs and the Council could recognize the financial implications of their policy objectives. The Hitch plan permits the services to develop their programs without the imposition of arbitrary financial ceilings in the early stages of the budget cycle. The primary purpose of the programming phase is to permit the Secretary of Defense to evaluate the alternative programs proposed by the service as they relate to achieving the national security objectives. This evaluation is based upon cost and military worth comparisons of the various programs not only in terms of annual requirements but also over the entire life span of the particular program.

At the present time, the program package plan utilizes the "performance budget" appropriation structure as its vehicle for submission to the Congress. It also lacks the second part of the two part budget proposed by Smithies and Mosher. The use of an administrative budget has not been proposed as yet.

### CHAPTER III

#### PROGRAM Vs. PERFORMANCE, SOME CONCLUSIONS

The literature that has been reviewed contained some significant proposals for budget formulation. Each proposal was concerned with programs and program functions that related to some form of end product. In this respect, they corresponded to the first Hoover Committee's recommendation which called for a budget that revealed "functions, activities, and projects." None of these proposals could be termed a performance budget. This fact enables some conclusions to be drawn in this Chapter about the nature of program and performance.

#### THE NATURE OF THE PROGRAM BUDGET

The terms program and performance may not be used interchangeably. As a result of the review in the previous Chapter, the program budget has emerged as a concept of definitive content while performance has become increasingly obscure. The program itself may be defined as a projection of future operations which is achieved through a combination of policy, planning, and cost comparison. The program budget is merely a translation of these future operations into dollars. The framework or structure of the program is determined by the requirements of the agency or person making the decision between related programs. A program budget is a tool for review and decision at the

highest level. It is designed for overall budgetary review but it has little direct relation to performance.

Each proposal for a program budget has contained some references to a system of controls that would permit a performance evaluation of achievements that have been obtained. Each author, however, stated that a true administrative budget that would report performance would necessarily have to be structured about the organizational unit without regard function. The simple solution would be to match activity function to program function, or more simply, to match program functions to activity function. The functional budgets that were introduced in the early fifties did the opposite.

The so called performance budgets that implemented the Hoover recommendations selected functions that separated labor costs from material costs at the Departmental level. This dichotomy has subsequently made it almost impossible to evaluate the cost of activities, missions, and products, functional commands or geographic areas. This functional budget was aptly described by Mr. Hitch as "collections of objects used in a variety of tasks".<sup>1</sup> Oddly enough, the appropriation titles are properly described as programs, and it is a functional budget. The trouble stems from the loose interpretation that was placed on the terms functions, activities, and projects. This also applies to the answer that was made to the question

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<sup>1</sup>Hitch and McKean, Op. Cit., p. 53.

of what is done with defense money.

The end product programs of Mr. Hitch come the closest to describing what is done with defense money. The program elements also come closer to being activity oriented than any of the other proposals. Most of the organization within the program elements contribute to but one program. Funds appropriated to these programs would permit the use of but one allotment at most defense activities. While it would probably be impractical to place all defense organizations in an exact program, the end product appropriation would be a vast improvement over the present type of functional classification.

#### THE NATURE OF PERFORMANCE BUDGETING

The performance budget has become an enigma. The term itself contains an internal contradiction. By definition, performance refers to the execution of a function; the accomplishment of some action. Budget, on the other hand, denotes a plan for future financial operations. It therefore becomes difficult it not impossible to plan for something that has already been accomplished. The term performance should not have been applied to budgeting. The concept that was expressed by the Hoover Commission was that of a program budget. What was desired was a program budget that could be administered on an activity basis in order to permit performance evaluation. Had this concept been explicitly stated when functional budgets were introduced, the present appropriation structure might

bear a closer resemblance to the program proposals reviewed in this study. The use of the word performance by the first Hoover Commission sent people in many different directions in attempt to achieve ends that lacked definition. Burkhead perceived this when he held that performance could only be based on the past.<sup>2</sup>

#### THE MEASUREMENT OF PERFORMANCE

A number of conditions must be fulfilled in order to evaluate performance. As mentioned before, the activity must conform or be organized in such manner as to contribute to but one program. Secondly it must be possible to measure full costs. This later objective may only be obtained through the use of accrual accounting and costs based budgets. A cost based or cost data budget is defined as one which gives recognition to the costs of programs in terms of goods and services actually consumed. Using cost data makes it possible to review the balance of goods and services on hand that have been obtained with prior appropriations; and determine the extent to which they will be consumed during the budget period. This type of budgeting permits the measurement of the flow of costs as they are actually consumed by the performing activity. The advantage of the cost based budget is that management can review total resources when preparing activity budgets. Accrual accounting is the tool which makes this

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<sup>2</sup>Burkhead, Op. Cit., p. 139.

measurement possible. It gives recognition to receipt of goods and services and the consumption or use of assets, as well as keeping an account of assets and liabilities.

#### THE LIMITS OF PERFORMANCE EVALUATION

It is possible to construct an accounting system to report the achievement of program objectives. This accounting system would be based upon the organizational units that contributed to the program. This performance unit or classification would relate things bought for defense to the mission of the activity for which bought. It would provide the link between things bought and things done or accomplished. For example, all items involved in the operation of a Polaris submarine would be chargeable to that particular element in the Hitch program. In doing this, the performance unit being measured is the Polaris program in its relation to other program elements of like mission. Charging objects bought to an end product does not mean that the performance of the end product is being measured. A standard of performance has not been set by establishing a performance classification.

Considered on its own, performance classification does not produce better programs at lower costs. It does permit review and comparison of alternate programs by top management. However, the measurement of performance for a particular program element or activity within an element is beyond the scope of budgeting and

financial management. The performance of a unit with a military mission cannot be best measured in terms of dollars. What is measurable is the amount of defense that has been procured with a particular program. Most of the confusion with regard to performance has been in this area. Performance has been construed to mean activity accomplishment in the industrial or commercial sense. Higher production rates, lower overhead, greater profit, are the common indicators that are considered when one thinks of performance. They do not exist in the military except in a few quasi-commercial type activities. When the term performance is applied to military spending, it can only refer to achieving the program objectives that were stipulated in the original budget at a cost equal to or less than that anticipated.

The difficulties inherent in performance evaluation of a military unit can be demonstrated by examining its application to a fleet ship, a destroyer, for example. Assume that this ship were given all of the accounting devices and tools associated with performance reporting. Its inventories would be capitalized and it would use accrual accounting. It should be possible to measure the performance of this destroyer by equating the amount of money expended to the degree within which this ship met the object of its program mission. Unfortunately, neither side of this equation is subject to financial measurement.

The amount of funds expended by a fleet ship is subject to

many variables. Perhaps the most important of these being the maintenance policy of the ship and the maintenance capability of the ship's crew. A ship that performs extensive maintenance may expend twice the funds of a sister ship that performs little or no maintenance. The effect of this policy might become apparent in the ship's ability to meet operational commitments but this is subject to chance. Lack of maintenance might also become apparent during ship overhaul but it would take a superior being to wade through a ship's repair list to sort out those costs that were due solely to poor maintenance. Other factors that effect a ship's expenditure level include its area of operation, type of operation, and type of equipment installed on board. Cold weather operations usually result in higher costs. A ship deployed will use electronic equipment for a greater number of hours than a ship operating in U.S. waters and consequently replace more tubes and parts. The type of magnetron tube utilized by a ship's radar can have a significant effect on total expenditures. The price of these tubes range from \$670 to \$8800. It is therefore extremely difficult to measure the expense side of the equation in evaluating a ship's performance.

The performance side of the equation is even more difficult to evaluate. The closet thing to performance evaluation now in use is the ship's competitive standing in fleet exercises. This measurement might be used but its adequacy is most questionable. These have been but a few of the reasons for the difficulty that would be



encountered in evaluating the military performance of a defense unit of the other services. In the last analysis, military performance is an abstract and unknown quantity until the shooting starts.

#### PROGRAM PERFORMANCE

Perhaps the most important aspect of this study is to emphasize the distinction that must be made between program performance and military mission performance. While it is difficult to use dollars to measure the manner in which a unit performs its military mission, these same dollars are the main basis for measuring program performance. Program performance may be defined as the measurement of individual activity and aggregate costs incurred in establishing and maintaining a particular defense program or program element. Program Performance does not permit the evaluation of the military worth or military readiness of the performing units. Its function is to provide defense management with reports of actual costs incurred in the accomplishment of a program. It follows from this that program performance can not be used as the basis for the construction of activity budgets. This is because the performing unit is merely spending the amount of money originally projected in the program budget. There is no performance requirement to stimulate economy in operations other than a budgetary ceiling. The lack of performance indicators inherent in defense activities therefore requires extensive use of administrative budgets to control expenditures. This type of budgeting must be based upon historical costs

and comparisons between similar activities. It cannot be based upon activity performance.

#### SUMMARY

✓ A distinction has been made between program and performance budgeting. The use of the word performance by the first Hoover Commission appears to have caused the subsequent difficulties in establishing "performance budgets" within the Defense Department. In implementing a budget that revealed what government does with its money, the Defense Department selected functions that were in consonance with previous appropriations titles and more or less corresponded to departmental organizations. The revised budgetary structure consisted of programs that made it impossible to determine activity costs. This condition still exists in the present appropriation structure. A true functional budget that depicts the cost of defense activities must reveal what is achieved. The functions that were selected in the "performance" appropriation structure were intermediate products. They do not reveal the kind of defense that is being bought. The end product approach that was proposed by Mosher, Smithies, and finally Hitch solves this problem. These functional budgets are based upon military programs and may be termed program budgets.

✓ Performance budgets never existed as such. There have been budgets that permitted the measurement of performance but these are

more properly described as cost-based budgets. They are dependent upon a product that has measureable output. That is, they can only be used when it is possible to measure activity output in some concrete terms. It is also necessary that the output be directly and completely related to the amount budgeted. It has been shown that this type of budget will not measure the performance of a Defense Activity. However it was shown that the program contribution of a defense activity could be measured. This measurement was termed program performance, a type of performance which informs top management of the actual program costs for defense. While this is a very limited form of performance, it is the only real financial measurement available.

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